All 21 Counties Moving Forward...

The SVRS Project Newsletter has been a staple of my comprehensive communication plan and has served us well during the past year - keeping all county election officials and other interested parties informed of the current status of the project and of any upcoming initiatives related to the SVRS. With the SVRS now deployed and in use in all 21 counties, and the SVRS project now in the bug fix and enhancement stages, I believe it is time to take our publication to the next level and begin reporting on all HAVA-related issues. Accordingly, in this newsletter you will find updates on voting systems and audio kits, in addition to SVRS-specific content. Please feel free to give us feedback on the new format and let us know if there are any additional topics that you would like to see included in the new HAVA Newsletter.

Incorporating the numerous HAVA mandates into NJ operations has been and continues to be challenging. It seems that so many of the changes/implementations have occurred simultaneously and more often than not, the time line for the implementation has not considered the already overwhelming activities that take place during elections. Whereas in many cases, the timing of the implementation was beyond our control, I do recognize the strain that some of these changes have put on your resources, I appreciate the great efforts you have made to assist us in meeting many of those implementation schedules. As always, the NJ Election Community with their passion for and commitment to the electoral process manages to find a way to get everything done while preserving the integrity of our elections. It is my sincere pledge that as we continue to implement the various HAVA mandates. I will do everything I can to recognize the operational impacts an implementation may have on your offices and will do my best to minimize the strain the implementation will have on your resources.

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We would like to thank the Hunterdon Board of Elections team for their aggressive effort to be ready to use the new SVRS for the November election and for their overwhelming flexibility and support as we work through application fixes and data corrections.

Specifically, we would like to thank Dick Lynch, Laura Cox, Ashley Singleton, Michelle Delgado, and Kim Brink.

What a great team and partner!!"

SVRS Training and County Support

In my comprehensive SVRS Project Status Report forwarded to all county election officials in late June, I noted that the success of any system implementation often hinges on the level and adequacy of training provided for the system being deployed. At that time, I outlined the SVRS Project Management Office's plan to provide follow-up/refresher training to all county election officials who chose to participate in such training. Saber is now in the process of completing that training and we have received overwhelmingly positive feedback from those who participated.

Also, as noted in the comprehensive SVRS Project Status Report issued in late June, at the conclusion of the follow-up/refresher training, the State will be coordinating on-site support visits with every county office. Recognizing that the SVRS deployment occurred during the peak of the election season, we want to ensure that all county offices are given the instructional support they need to successfully use the SVRS. Accordingly, we are re-deploying Saber representatives to each county office for additional on-site support. These visits will be tailored to meet the specific needs of each county office upon the arrival of the support team.

SVRS Enhancement Requests

Included with the comprehensive SVRS Project Status Report issued in late June was a list of the many enhancement requests that were submitted to the State during the various JAD sessions, UAT activities, and upon application use after its deployment. As you can imagine, this list continues to grow daily. In the next week or so, I will be providing you with an updated list along with the status of where the enhancement requests are in the process. Many of the enhancement requests have already been analyzed, approved, and are reflected on change orders that are currently in the queue to be developed. In some instances, the enhancement has already been developed and deployed. Others remain open, pending analysis and approval. Ultimately, I will be posting this list, along with the status of each enhancement request, on our website so that you can check it regularly.

We expect that by moving forward with these enhancements, the SVRS will be more efficient and user-friendly. Accordingly, we are hoping to get many of these enhancements completed prior to the November election. Please note that enhancement requests that require a JAD session will be handled at a later date.

Mock Election Set-Up / SVRS Stress Test - July 27th

The NJAEO, in coordination with the State SVRS team, conducted a Mock Election Set-up/SVRS Stress Test on July 27th. Overall the exercise went very well and served as an excellent tool to gauge the capabilities and limits of the SVRS. There were some periods of system sluggishness reported during the exercise and we are now working with the technical team to identify the reason for the sluggishness, what activities were taking place during those instances, and implementing a plan to address such instances so that they do not occur again.

A performance report provided by Saber summarized the system's response to the exercise as follows:

- Preliminary stress load volume tests on the SVRS were conducted on 06/17/2006 using the virtual load generating tools and reports were provided to the State. The SVRS system performance test with election mockup scenarios was conducted on 7/27/2006 from all 21 Counties in a real-time environment.

- NJ SVRS SVL (Stress Volume load) tests consisted of 5 groups of user communities from different county offices creating the load on the State server with about 477 concurrent users from all 21 Counties on the State side, and 343 concurrent users from 18 Counties (3 counties, Cape May, Bergen and Passaic were logged into the State server directly).

All these users were ramped up in 15 minute durations and were running for 60 minutes. The system has recorded about 1293 total logins between 8:30 am to 12:00 pm. During this test, all 21 County servers were connected to the State server and data was being replicated to these servers from the State server.

The State-side web and application servers handled the load very well and the CPU usage was less than 20% on these servers. Memory page swapping was less than 25%. Disk utilization was less than 20%.

The State-side database server also handled the volume very well and the CPU usage ranged from 40% to 50%. Memory paging to disk was less than 15%. Disk utilization was less than 25%.

The State-side report servers handled the volume very well and the CPU usage was less than 55% on each of two report servers. Memory page swapping was less than 25%. Disk utilization was less than 20%.

The State-side replication servers performed very well. The CPU usage was less than 50% on these servers. Memory page swapping was less than 25%. Disk utilization was less than 20%.

The county-side database servers experienced the greater activity. During the time of data synchronization, the CPU usage of the database server ranged from 20% to 65%. Memory paging to disk was less than 20%. Disk utilization was less than 25%. County application servers CPU usage was less than 40% on each of two servers. Memory page swapping was less than 25%. Disk utilization was less than 20%.

During this test, users added / changed about 3404 voter records and requested 327 reports on the state server. All the voters have been successfully replicated on to 21 county backup servers. Except for two reports, all reports were processed successfully. Other transactions statistics are summarized as follows:

1. **State-side transactions summary:**

a. Number of Voter records added on the State server: 3404 (across 21 Counties)

b. All these 3404 voters have been replicated to 21 County servers

c. Number of Voter history records added: 7861

d. Number of Absentee Ballot Request records added: 528

e. Number of Absentee Ballot records added: 198

f. Number of Poll Workers records added or changed: 327

g. Number of Polling Place records added or changed: 83

h. Number of new Street records added or changed: 552

i. Number of Street Segments added or changed: 1011

j. Number of voters whose districts were affected: 13,790

k. Number of Reports requested: 310 (385 for all day)
   i. 308 reports successfully processed
   ii. 2 reports failed (report ids 50003877,150003723)

2. **AT&T and MPLS network bandwidth utilization: Outbound 25% and Inbound 5%**

3. **County-side transaction summary: (County Backup Servers were used only for processing the reports alone, as all 21 county servers were in the mode "State Server Up and Running")**

a. Number of Reports requested and processed from 18 counties: 204
   i. 202 reports successfully processed
   ii. 2 reports failed

b. 3 Counties (Cape May, Bergen and Passaic) did not use their County Servers for processing their reports. They were, however, processing the reports on the State server.

c. Successfully replicated the added / changed records on the state server

Neopost Equipment Update

Earlier this summer, the State purchased folding and tabbing equipment for each county. At this point, all counties have received the Tabbing System (TA50) and the Folding Machine (PF-45A). Neopost representatives have been visiting county offices to set up the equipment and conduct training. We anticipate that all counties will be set up and trained by the end of August.

County Back-Up, Report Servers, and Crystal Reports

The deployment of the much awaited County Back-Up solution was completed for all 21 counties just prior to the July 27th Mock Election/Stress Test exercises. In coordination with this deployment, the Report Servers were also activated. Counties are now pulling data and running reports from their local server and should see a significant improvement in report-generating performance. The final phase of this deployment is the implementation of Crystal Reports, an ad hoc report generating tool that county technical staff can use to develop custom reports from the data currently residing on their local server. Matt Sibenik is currently in the process of reaching out to the counties' technical liaisons to arrange delivery of the crystal reports package. If you have not yet heard from Matt regarding this, please call him directly at (609) 588-8679 to arrange for the delivery of this software product. If e-mailing Matt, please be sure to include the actual street mailing address and specific contact information so that we can be certain the package gets in the proper hands. Once delivered, the county technical staff will do the installation and set-up work required to start using the software.

Audio Kit Upgrades

For the 2006 June Primary Election, Atlantic, Camden, Cape May, Cumberland, Essex, Hudson, Mercer, Monmouth, Passaic, Salem and Sussex Counties all had audio devices present on the voting machines in their counties. Beginning in June, Sequoia resumed installation of the audio kit upgrades in Bergen, Burlington, Gloucester, Hunterdon, Middlesex, Morris, Ocean, Somerset and Union Counties. The installation of the audio kits is completed in all the above counties with the exception of Morris and Union Counties which are due to be installed by the middle of September. Warren County is currently receiving new Avante Vote-Trakker voting machines which are equipped with audio voting; delivery of these machines is expected to be completed by the end of the summer. It is anticipated that the State of New Jersey will achieve 100% audio voting compliance by the end of the summer. Thanks to all the counties for their patience and dedication during the implementation and training phases of this initiative.

Voter Verifiable Paper Audit Trail Update

The Office of the Attorney General is in the process of finalizing Voter Verifiable Paper Audit Trail criteria and has solicited input from the county election officials and the voting machine companies with machines currently in New Jersey-Avante, ES&S and Sequioa. The criteria have been released for public comment and it is the goal of the Attorney General's Office to issue final VVPAT criteria by the end of the summer.

Remote Tally Reimbursement

The Office of the Attorney General extended an offer to reimburse counties for the purchase of remote tallying equipment for use in expediting the tabulation of votes on election night. To that end, this office has purchased servers for those counties and will also reimburse the cost of the remote tally cartridge readers. Any questions on this initiative should be directed to Bryan Rusciano at 609-588-7127.

Good Luck & Best Wishes to Kathleen Brannigan

We wish to extend our best wishes and thoughts to Kathleen Brannigan as she departs New Jersey State Government and the HAVA Unit to take a position at the New York City Department of Education. Kathleen was a wonderful addition to our team and her presence in this office will be greatly missed. Good Luck Kathleen!